

Work Order ID 54957



January 5, 2010 10:44:48 AM

Item ID: D350-636-012

Accept



Setup Start



Revision ID:

Item Name: Skidtube RH

Stop



Start Date: 05/01/2010 Start Qty: 100



Cust Item ID:

Required Date: 18/01/2010 Req'd Qty: 100



Customer:

Reference:

Approvals:

Process Plan:

[Signature]

Date: 10-1-05

Tooling:

Date:

Run Start



QC:

Date:

SPC (Y/N):

Date:

Stop



Sequence ID/
Work Center ID

Operation
Description

Set Up/
Run Hours

Draw
Number

Draw
Rev.

Plan
Code

Accept
Qty

Reject
Qty

Reject
Number

Insp.
Stamp

Draw Nbr

Revision Nbr

D2750

Rev F

100

0.00



DOCUMENT CONTROL

DC

Memo

0.00

Document Control

Photocopy blue file and type labels per PPP D350-636-012 CHG 005

8 10/1/26

[Signature] for MF 10/01/25

54957

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Work Order ID 54957

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Item ID: D350-636-012

Accept

Setup Start

Revision ID:

Stop

Item Name: Skidtube RH

Start Date: 05/01/2010 Start Qty: 1.00

Cust Item ID:

Required Date: 18/01/2010 Req'd Qty: 1.00

Customer:

Reference:

Run Start

Approvals:

Process Plan:

Date:

Tooling:

Date:

QC:

Date:

SPC (Y/N):

Date:

Stop

Sequence ID/
Work Center IDOperation
DescriptionSet Up/
Run HoursDraw
NumberDraw
Rev.Plan
CodeAccept
QtyReject
QtyReject
NumberInsp.
Stamp

110

0.00



Skidtubes

Skidtubes

Memo

0.00

Skidtubes

1- Mark cut line on aft end of D2600-3-Bent using Jig DT 8150. Cut to length as per Dwg D2750. Deburr end

2-Drill pilot holes as per Dwg D2750 sheet 5 (D2750-2 details). Drill using drill Jig DT8150 & DT8863

3- Mark fwd end for cutting using Drill Jig DT 8150 & DT8863 and cut as per dwg D2750.

4-Drill pilot holes for blade fitting bolts using DT8983. Open to 0.500"

5- locate DT8329 off of blade fitting bolt holes and drill pilot holes blade fitting.

6-Open up holes for Detail K to 0.375" (4 holes per side) blade fitting location holes to 0.500" (total of 4 holes per side) as per dwg D2750. Open holes for ground handling and detail L to 0.500" (8 holes per side)

7-Drill pilot holes for wearplates as per Dwg D2750 using DT8108. Open to 0.297"

8-Open up holes of Detail J to 0.297" (total of 2 holes per side)

9-Weld D2744 Cap as per Dwg D2750 and QSI 004. Fill grooves in bend left from bending as per QSI 004

A/R Aluminum Rod

10-Grind welds flush as per Dwg D2750

11/10/11/6

11/10/11/6

M112860

BE

10/01/07

BE

10/01/07

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
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NOTE: Date & initial all entries

Work Order ID 54957

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Item ID: D350-636-012

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Setup Start



Revision ID:

Stop



Item Name: Skidtube RH

Start Date: 05/01/2010 Start Qty: 1.00



Cust Item ID:

Required Date: 3/01/2010 Req'd Qty: 1.00



Customer:

Reference:

Run Start



Approvals:

Process Plan:

Date:

Tooling:

Date:

Stop



QC:

Date:

SPC (Y/N):

Date:

Sequence ID/
Work Center IDOperation
DescriptionSet Up/
Run HoursDraw
NumberDraw
Rev.Plan
CodeAccept
QtyReject
QtyReject
NumberInsp.
Stamp

11- scribe batch #.

BE 10/01/07

120

QC10- Inspect visual per QSI004- ground welds

0.00



QC

Memo

0.00

=> 81060107



Quality Control

130

QC5- Inspect part completeness to step on W/O

0.00



QC

Memo

0.00

=> 81060107



Quality Control

140

Chemical Conversion Coat per QSI005 4.1

0.00



HandFinish

Memo

0.00



MS 10-01-11

Hand Finishing

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
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NOTE: Date & initial all entries

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Item ID: D350-636-012

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Revision ID:

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Item Name: Skidtube RH

Start Date: 05/01/2010 Start Qty: 1.00



Cust Item ID:

Required Date: 18/01/2010 Req'd Qty: 1.00



Customer:

Reference:

Run Start



Approvals:

Process Plan: _____

Date: _____

Tooling: _____

Date: _____

Stop



QC: _____

Date: _____

SPC (Y/N): _____

Date: _____

Sequence ID/
Work Center IDOperation
DescriptionSet Up/
Run HoursDraw
NumberDraw
Rev.Plan
CodeAccept
QtyReject
QtyReject
NumberInsp.
Stamp

150

QC3- Inspect Part Finish

0.00



QC

Memo

0.00

Quality Control

1 W 10/1/11

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

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Start Date: 05/01/2010 Start Qty: 1.00

Required Date: 18/01/2010 Req'd Qty: 1.00

Cust Item ID:

Customer:

Reference

Run Start



Approvals:

Process Plan:

Date:

Tooling:

Date:

Stop



QC:

Date:

SPC (Y/N):

Date:

Sequence ID/
Work Center IDOperation
DescriptionSet Up/
Run HoursDraw
NumberDraw
Rev.Plan
CodeAccept
QtyReject
QtyReject
NumberInsp.
Stamp

160

0.00



Skidtubes

Skidtubes

0.00

Memo

1-Open up holes of Detail L and ground handling to 0.625" (total of 8 holes per side) as per dwg D2750.

2-Open up holes of Detail K to 0.750" (total of 4 holes per side) as per dwg D2750.

3-Open float holes to .500" (4 per Side)

4-Chamfer holes of Detail K, L, ground handling and float holes per dwg D2750 (welding instructions on sheet 9)

5-Deburr and blow out all chips from inside of tube

6-Prepare tube for welding, remove alodine as required.

7-Bond web D2739 in place as per QSI 015

A/R ☐ Sikaflex-291

batch:

exp. date:

8- Weld spacers D3490-1, D3490-3 and D2743 as per dwg D2750 & QSI004 (welding instructions on sheet 9)

A/R ☐ Aluminum Rod

batch:

9-Grind welds flush as per Dwg D2750

10-Spot face ground handling holes section (total of 4 places perside) as per dwg D2750

NMB
10-01-11

AWM 10 01-11

112395
10-02-20

M112860

#5 10/01/12

a.m

10-01-13

B

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: D350-636-02 PAR #: _____ Fault Category: Skid d. be NCR: (Yes) No DQA: / Date: 10-01-28
 Resolution: Rework Disposition: rework QA: N/C Closed: / Date: 10-01-28

NCR: 54957		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			
10/11/13	#160,8	During Re Drilling of x-bolt base spacer after welding the drill bit caught on pulsed side ways on the weld. causing multiple score on the in- side of the x-bolt spacer. R.C. Process	CP 10.01.13 per QSI 042	- Drill out the 20th hole From aft + Remove x-bolt Spacer + - Re weld new D3490-3 B*48276 qty +1 Per QST004 A/R M112860	ANM 10-1-14	S 10/01/14	CP 10.01.13 per QSI 042	S 10/01/13
			RES142 10-01-28		BE 10/01/14	S 10/01/14	RES142 10-01-28	S 10/01/13

NOTE: Date & initial all entries

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Item Name: Skidtube RH

Start Date: 05/01/2010 Start Qty: 1.00



Cust Item ID:

Required Date: 18/01/2010 Req'd Qty: 1.00



Customer:

Reference:

Approvals:

Process Plan:

Date:

Tooling:

Date:

Run Start



QC:

Date:

SPC (Y/N):

Date:

Stop

Sequence ID/
Work Center IDOperation
DescriptionSet Up/
Run HoursDraw
NumberDraw
Rev.Plan
CodeAccept
QtyReject
QtyReject
NumberInsp.
Stamp

11- At section AJ-AJ drill out x-bolt spacer to 0.404"

BE 10/01/12

12-Deburr holes

170



QC

Quality Control

QC10- Inspect visual per QSI004- ground welds

0.00

=> 8.10.10.14

Memo

0.00

180



QC

Quality Control

QC5- Inspect part completeness to step on W/O

0.00

=> 8.10.10.14

Memo

0.00



W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
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NOTE: Date & initial all entries

Work Order ID 54957

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Stop



Item Name: Skidtube RH

Start Date: 05/01/2010 Start Qty: 1.00



Cust Item ID:

Required Date: 18/01/2010 Req'd Qty: 1.00



Customer:

Reference:

Run Start



Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____

Stop



QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Draw Number	Draw Rev.	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
--------------------------------	--------------------------	----------------------	----------------	--------------	--------------	---------------	---------------	------------------	----------------

190 Pressure Wash per QSI005 4.3

0.00



HandFinish

Memo

0.00

=> JH

10-01-15

(X) /

Hand Finishing

200 White Gloss(Ref:4.3.5.1) per QSI005 4.3-Alum

0.00



Powdercoat

Memo

0.00

=> JH

10-01-18

(X) /

Powder Coating

START TIME: 9:15AM
OVEN TEMPERATURE: 320°F
FINISH TIME: 9:45AM

210 QC3- Inspect Part Finish

0.00



QC

Memo

0.00

BR

10-01-20

(X) /

Quality Control

Inspect for foreign object per QSI 024

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

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DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
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NOTE: Date & initial all entries

Work Order ID 54957

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Item ID: D350-636-012

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Setup Start



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Item Name: Skidtube RH

Start Date: 05/01/2010 Start Qty: 1.00



Cust Item ID:

Required Date: 18/01/2010 Req'd Qty: 1.00



Customer:

Reference:

Run Start



Approvals:

Process Plan:

Date:

Tooling:

Date:

Stop



QC:

Date:

SPC (Y/N):

Date:

Sequence ID/
Work Center ID

Operation
Description

Set Up/
Run Hours

Draw
Number

Draw
Rev.

Plan
Code

Accept
Qty

Reject
Qty

Reject
Number

Insp.
Stamp

220



HandFinishing

0.00

HandFinish

Memo

0.00

Hand Finishing

Install inserts as per dwg D2750

BR 10-01-20

230



HandFinishing

0.00

HandFinish

Memo

0.00

Hand Finishing

1-Inspect for Foreign Objects

2-Spray inside of tube with "LPS-3"
batch: _____

3-Install blade fitting D3488-042, wearshoes and ground handling hardware as
per dwg D2750

SIKA FLEX 241

BATCH: M 112345

EXP DATE: 10/08

4-assemble o-ring to plug as per dwg D3492 and apply o-ring lube
A/R 55-o-ring lube batch: M 01223

5-Coat all exposed fasteners with "LPS Procyon"
batch: M 104251

BR 10-01-20

D

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

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DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
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NOTE: Date & initial all entries

Work Order ID 54957

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Item ID: D350-636-012

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Item Name: Skidtube RH

Start Date: 05/01/2010 Start Qty: 1.00



Cust Item ID:

Required Date: 18/01/2010 Req'd Qty: 1.00



Customer:

Reference:

Run Start



Approvals:

Process Plan:

Date:

Tooling:

Date:

Stop



QC:

Date:

SPC (Y/N):

Date:

Sequence ID/
Work Center ID

Operation
Description

Set Up/
Run Hours

Draw
Number

Draw
Rev.

Plan
Code

Accept
Qty

Reject
Qty

Reject
Number

Insp.
Stamp

240

QC5- Inspect part completeness to step on W/O

0.00



2) 8 10/11/20

QC

Memo

0.00

Quality Control

QC

250

Pick Kit

0.00



Packaging

Memo

0.00

Packaging

10-1-22 sf

260

QC4- 100% Inspect kits for completeness

0.00



2) 8 10/6/20

QC

Memo

0.00

Quality Control

QC

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

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Required Date: 18/01/2010 Req'd Qty: 1.00

Reference:

Cust Item ID:

Customer:

Approvals:

Process Plan:

Date:

Tooling:

Date:

QC:

Date:

SPC (Y/N):

Date:

Run Start

Stop

Sequence ID/
Work Center IDOperation
DescriptionSet Up/
Run HoursDraw
NumberDraw
Rev.Plan
CodeAccept
QtyReject
QtyReject
NumberInsp.
Stamp

270

0.00



Packaging

Packaging

Memo

0.00

Packaging

Package as per PPP D350-636-012

NEW

10/1/26

280

0.00



QC21- Final Inspection - Work Order Release

QC

Memo

0.00

Quality Control

10/1/27

MP
10-1-27

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Picklist Print

January 6, 2010 9:16:04 AM

Page 1

19

Work Order ID: 54957



Parent Item: D350-636-012



Parent Item Name: Skidtube RH

Start Date: 05/01/2010

Required Date: 18/01/2010

Comments: IPP RevP: as per ECN9490 DD 09.12.09 verified by:EC

Start Qty: 1.00

Required Qty: 1.00

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	East Location	Route Seq ID	Unit of Measure	Qty on Hand	Remaining Qty To Pick	Qty Issued	Date Issued	Status
ALS4-1032-225		Purchased	No			220	Each	6,691.000	38.0000			

Insert

Warehouse Loc Qty Loc Code
Location

Main Warehouse

ST 6691
107441 16
110768 ✓ 6675

AN3CSA

Purchased

No

230

Each

609.0000

34.0000



Bolt

Warehouse Loc Qty Loc Code
Location

Main Warehouse

ST *113644* 609
111424 8
111707 69
112314 1
113121 231
113149 300

34. 1/10 10-01-20.

AN3C6A

Purchased

No

230

Each

828.0000

4.0000



BOLT

Warehouse Loc Qty Loc Code
Location

Main Warehouse

ST 828
111982 ✓ 828

4 1/10 10-01-20.

Picklist Print

January 6, 2010 9:16:05 AM

Work Order ID: 54957



Parent Item: D350-636-012



Parent Item Name: Skidtube RH

Start Date: 05/01/2010

Required Date: 18/01/2010

Comments: IPP RevP: as per ECN9490 DD 09.12.09 verified by:EC

Start Qty: 1.00

Required Qty: 1.00

Component ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Remaining Qty To Pick	Qty Issued	Date Issued	Status
AN6C44A		Purchased	No			230	Each	148.0000	4.0000			

BOLT

<u>Warehouse</u>	<u>Loc Qty</u>	<u>Loc Code</u>
<u>Location</u>		
OFFSHORE		
FG	2	
103964	2	
Main Warehouse		
ST	146	
110105	4	
110155	14	
110665	1	
111605	50	
111649	50	
112720	9	
113121✓	18	

4 B/L 10-01-20.

AN8C35A

Purchased

No

230

Each

137.0000

1.0000



BOLT

<u>Warehouse</u>	<u>Loc Qty</u>	<u>Loc Code</u>
<u>Location</u>		
Main Warehouse		
ST	137	
102180	1	
106896	1	
110105	48	
110847✓	87	

1 B/L 10-01-20.

Picklist Print

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Start Date: 05/01/2010

Required Date: 18/01/2010

Comments: IPP RevP: as per ECN9490 DD 09.12.09 verified by:EC

Start Qty: 1.00

Required Qty: 1.00

Component Item IF Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Remaining Qty To Pick	Qty Issued	Date Issued	Status
AN960C10L 		Purchased	No			230	Each	388.0000	38.0000			
washer												

Warehouse

Loc Qty

Loc Code

Location

NAS1149C0332 P OFFSHORE FG 113288

100

103585

100

Main Warehouse

ST

288

112116

128

112612

160

88. BK 10-01-20.

AN960C816L

Purchased

No

230

Each

240.0000

1.0000

WASHER

Warehouse

Loc Qty

Loc Code

Location

Main Warehouse

ST

240

104093

2

107520

4

110139

29

110584

100

111424

105

1 BK 10-01-20.

Picklist Print

January 6, 2010 9:16:05 AM

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Start Date: 05/01/2010

Required Date: 18/01/2010

Comments: IPP RevP: as per ECN9490 DD 09.12.09 verified by:EC

Start Qty: 1.00

Required Qty: 1.00

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Site Qty ID	Unit of Measure	Qty on Hand	Remaining Qty To Pick	Qty Issued	Date Issued	Status
D2745		Manufactured	No			230	Each	346.0000	8.0000			

Bushing

<u>Warehouse</u>	<u>Loc Qty</u>	<u>Loc Code</u>
<u>Location</u>		
Main Warehouse		
ST	59	
34817	2	
36230	8	
37303	1	
39587	2	
40726	2	
41114	2	
42778	6	
43754	2	
44893	33	
45556	1	
Main Warehouse		
ST46	287	
51537	70	
51910	36	
52311	181	

8 10-01-20

Picklist Print

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Required Date: 18/01/2010

Comments: IPP RevP: as per ECN9490 DD 09.12.09 verified by:EC

Start Qty: 1.00

Required Qty: 1.00

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq II	Unit of Measure	Qty on Hand	Remaining Qty To Pick	Qty Issued	Date Issued	Status
---------------------------------	------------------------	---------------	-------------	---------------------	------------------	-----------------	--------------------	----------------	--------------------------	---------------	----------------	--------

D3488-042

Manufactured

No

230

Each

16.0000

1.0000



Blade Fitting Assembly, RH

Warehouse

Loc Qty

Loc Code

Location

Main Warehouse

ST

16

29043

1

52666 ✓

15

D3492-041

Manufactured

No

230

Each

76.0000

8.0000



Plug Assembly

Warehouse

Loc Qty

Loc Code

Location

Main Warehouse

ST

76

51584 ✓

76

1 BR 10-01-20

8 BR 10-01-20

Picklist Print

January 6, 2010 9:16:05 AM

Work Order ID: 54957



Parent Item: D350-636-012



Parent Item Name: Skidtube RH

Start Date: 05/01/2010

Required Date: 18/01/2010

Comments: IPP RevP: as per ECN9490 DD 09.12.09 verified by:EC

Start Qty: 1.00

Required Qty: 1.00

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Remaining Qty To Pick	Qty Issued	Date Issued	Status
D3492-043		Manufactured	No			230	Each	143.0000	8.0000			

Plug Assembly

Warehouse Loc Qty Loc Code

Location

Main Warehouse

FP

123

54682 ✓

123

Main Warehouse

ST

20

52309 ✓

20

D3535-25

Manufactured No

230

Each

15.0000

1.0000



Wearshoe

Warehouse Loc Qty Loc Code

Location

Main Warehouse

FP

7

51927 ✓

7

Main Warehouse

ST

8

52589

8

4. Bkr 10-01-20

4 10-01-20

1 Bkr 10-01-20

Picklist Print

January 6, 2010 9:16:05 AM

Work Order ID: 54957

Parent Item: D350-636-012

Parent Item Name: Skidtube RH

Comments: IPP RevP: as per ECN9490 DD 09.12.09 verified by:EC

Start Date: 05/01/2010

Required Date: 18/01/2010

Start Qty: 1.00

Required Qty: 1.00

Component Item ID/ Item Name	Replacement Item ID	Orig/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit Measure	Qty on Hand	Remaining Qty To Pick	Qty Issued	Date Issued	Status
D3536-25		Manufactured	No			230	Each	40.0000	1.0000			

Gasket

<u>Warehouse</u>	<u>Loc Qty</u>	<u>Loc Code</u>
<u>Location</u>		
Main Warehouse		
FP10	35	
51607 ✓	9	
54479	26	
Main Warehouse		
ST	5	
45569	1	
47011	2	
47526	2	

1 PR 10-01-20.

D3537-1 Manufactured No



Wearpad

230 Each 141.0000 3.0000



<u>Warehouse</u>	<u>Loc Qty</u>	<u>Loc Code</u>
<u>Location</u>		
Main Warehouse		
FP	2	
48288	2	
Main Warehouse		
FP17	139	
51678 ✓	34	
51679	105	

3 PR 10-01-20.

Picklist Print

January 6, 2010 9:16:05 AM

Work Order ID: 54957



Parent Item: D350-636-012



Parent Item Name: Skidtube RH


Start Date: 05/01/2010

Required Date: 18/01/2010

Comments: IPP RevP: as per ECN9490 DD 09.12.09 verified by:EC


Start Qty: 1.00

Required Qty: 1.00

Component Item ID/ Item Name	Replacement Item ID	Mfg Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Remaining Qty To Pick	Qty Issued	Date Issued	Status
D3631-1  Washer		Manufactured	No			230	Each	442.0000	8.0000			

<u>Warehouse</u>	<u>Loc Qty</u>	<u>Loc Code</u>
<u>Location</u>		
Main Warehouse		
ST	442	
52693 ✓	142	
54388	300	

8 BR 10-01-20

D3672-1  Phenolic Washer		Manufactured	No			230	Each	1,744.0000	4.0000			
---	--	--------------	----	--	--	-----	------	------------	--------	--	--	--

<u>Warehouse</u>	<u>Loc Qty</u>	<u>Loc Code</u>
<u>Location</u>		
Main Warehouse		
ST	1244	
39275	19	
42329	5	
47628 ✓	220	
52505	1000	
Main Warehouse		
ST117	500	
51674	500	

4. BR 10-01-20

Picklist Print

Page 9

January 6, 2010 9:16:05 AM

Work Order ID: 54957



Parent Item: D350-636-012



Parent Item Name: Skidtube RH

Start Date: 05/01/2010

Required Date: 18/01/2010

Comments: IPP RevP: as per ECN9490 DD 09.12.09 verified by:EC

Start Qty: 1.00

Required Qty: 1.00

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty o Hand	Remaining Qty To Pick	Qty Issued	Date Issued	Status
D3791-1		Manufactured	No			230	Each	11.0000	1.0000			

Wearplate

<u>Warehouse</u>	<u>Loc Qty</u>	<u>Loc Code</u>
<u>Location</u>		
Main Warehouse		
FP	7	
51610 ✓	7	
Main Warehouse		
ST	4	
51909	4	

1 OK 10-01-20.

D3793-1 Manufactured No

230 Each 19.0000 1.0000



Wearshoe

<u>Warehouse</u>	<u>Loc Qty</u>	<u>Loc Code</u>
<u>Location</u>		
Main Warehouse		
ST	19	
40551	1	
51597	16	
51906 ✓	2	

1 OK 10-01-20.

Picklist Print

January 6, 2010 9:16:05 AM

Work Order ID: 54957



Parent Item: D350-636-012



Parent Item Name: Skidtube RH

Start Date: 05/01/2010

Required Date: 18/01/2010

Comments: IPP RevP: as per ECN9490 DD 09.12.09 verified by:EC

Start Qty: 1.00

Required Qty: 1.00

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Remaining Qty To Pick	Qty Issued	Date Issued	Status
D3793-3		Manufactured	No			230	Each	16.0000	1.0000			

Wearshoe

<u>Warehouse</u>	<u>Loc Qty</u>	<u>Loc Code</u>
<u>Location</u>		
Main Warehouse		
ST	16	
51592	12	
51903 ✓	4	

1 BR 10-01-20.

D3794-1

Manufactured No

230 Each 15.0000 1.0000



Gasket

<u>Warehouse</u>	<u>Loc Qty</u>	<u>Loc Code</u>
<u>Location</u>		
Main Warehouse		
FP	12	
51928 ✓	12	
Main Warehouse		
ST	3	
46530	1	
47212	2	

1 BR 10-01-20.

Picklist Print

January 6, 2010 9:16:05 AM

Work Order ID: 54957



Parent Item: D350-636-012



Parent Item Name: Skidtube RH

Start Date: 05/01/2010

Required Date: 18/01/2010

Comments: IPP RevP: as per ECN9490 DD 09.12.09 verified by:EC

Start Qty: 1.00

Required Qty: 1.00

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Remaining Qty To Pick	Qty Issued	Date Issued	Status
D3794-3		Manufactured	No			230	Each	21.0000	1.0000			

Gasket

Warehouse Loc Qty Loc Code

Location

Main Warehouse

FP 18

51598 ✓ 6

51907 12

Main Warehouse

ST 3

46531 2

47440 1

MS21043-6

Purchased

No

230

Each

1,000.000 4.0000



NUT

Warehouse Loc Qty Loc Code

Location

Main Warehouse

ST 1000

111424 8

112314 ✓ 992

1 BR 10-01-20.

4 BR 10-01-20.

Picklist Print

January 6, 2010 9:16:05 AM

Work Order ID: 54957



Parent Item: D350-636-012



Parent Item Name: Skidtube RH

Start Date: 05/01/2010

Required Date: 18/01/2010

Comments: IPP RevP: as per ECN9490 DD 09.12.09 verified by:EC

Start Qty: 1.00

Required Qty: 1.00

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Remaining Qty To Pick	Qty Issued	Date Issued	Status
MS21083C8		Purchased	No			230	Each	53.0000	1.0000			



NUT

<u>Warehouse</u>	<u>Loc Qty</u>	<u>Loc Code</u>
<u>Location</u>		
Main Warehouse		
ST	53	
110584	5	
111424	2	
112492 ✓	6	
113149	40	

1 BR 10-01-20.

NAS1611-010

Purchased

No

230

Each

330.0000


8.0000



O-RING

<u>Warehouse</u>	<u>Loc Qty</u>	<u>Loc Code</u>
<u>Location</u>		
Main Warehouse		
ST	330	
110715	44	
110915 ✓	286	

PTO

W/O: 54957		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector
10-01-20	220	CHANGE NAS 1611-010 O'RING FOR 2594-3. BATCH: 52862.	BR.	10-01-20	8		S 10/01/20

Part No: D350-636-012 PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			
	220							

NOTE: Date & initial all entries

Picklist Print

January 6, 2010 9:16:05 AM

Work Order ID: 54957



Parent Item: D350-636-012



Parent Item Name: Skidtube RH

Start Date: 05/01/2010

Required Date: 18/01/2010

Comments: IPP RevP: as per ECN9490 DD 09.12.09 verified by:EC

Start Qty: 1.00

Required Qty: 1.00

Component ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Location	Route Seq ID	Unit of Measure	Qty on Hand	Remaining Qty To Pick	Qty Issued	Date Issued	Status
NAS1611-013		Purchased	No			230	Each	74.0000	8.0000			
O-RING												

<u>Warehouse</u>	<u>Loc Qty</u>	<u>Loc Code</u>
<u>Location</u>		
Main Warehouse		
ST	74	
106513	11	
111424	20	
111758 ✓	43	

8

AN8C21A

Purchased

No

250

Each

148.0000 2.0000



BOLT

8 BR 10-01-20.
10-1-22 SD

<u>Warehouse</u>	<u>Loc Qty</u>	<u>Loc Code</u>
<u>Location</u>		
Main Warehouse		
ST	148	
105160	1	
107596	1	
107924	2	
109092	2	
110341	2	
110342	2	
111605	50	
112720	38	
113558	50	

Picklist Print

January 6, 2010 9:16:05 AM

Work Order ID: 54957



Parent Item: D350-636-012



Parent Item Name: Skidtube RH

Start Date: 05/01/2010

Required Date: 18/01/2010

Comments: IPP RevP: as per ECN9490 DD 09.12.09 verified by:EC

Start Qty: 1.00

Required Qty: 1.00

Component Item ID Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Remaining Qty To Pick	Qty Issued	Date Issued	Status
AN960C816L WASHER		Purchased	No			250	Each	240.0000	2.0000			

SP

<u>Warehouse</u>	<u>Loc Qty</u>	<u>Loc Code</u>
<u>Location</u>		
Main Warehouse		
ST	240	
104093	2	
107520	4	
110139	29	
110584	100	
111424	105	

2

D2741

Blade, 350 Skidtube

Manufactured No 250 Each 45.0000 1.0000

<u>Warehouse</u>	<u>Loc Qty</u>	<u>Loc Code</u>
<u>Location</u>		
Main Warehouse		
ST	45	
45320	1	
47113	4	
51931	40	

1

10-1-20 SP

Picklist Print

January 6, 2010 9:16:05 AM

Work Order ID: 54957



Parent Item: D350-636-012



Parent Item Name: Skidtube RH

Start Date: 05/01/2010

Required Date: 18/01/2010

Comments: IPP RevP: as per ECN9490 DD 09.12.09 verified by:EC

Start Qty: 1.00

Required Qty: 1.00

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route ID	Unit of Measure	Qty on Hand	Remaining Qty To Pick	Qty Issued	Date Issued	Status
---------------------------------	------------------------	---------------	-------------	---------------------	------------------	-------------	--------------------	----------------	--------------------------	---------------	----------------	--------

D3493-1		Manufactured	No			250	Each	55.0000	2.0000			
<div style="display: flex; justify-content: space-between;"> <div> <p>Washer</p> </div> <div> <p>10-1-20</p> </div> </div>												

Warehouse Loc Qty Loc Code

Location

Main Warehouse

ST 55

44902 2

47710 53

D3532-1		Manufactured	No			250	Each	80.0000	2.0000			
<div style="display: flex; justify-content: space-between;"> <div> <p>Spacer</p> </div> <div> <p>10-1-20</p> </div> </div>												

Warehouse Loc Qty Loc Code

Location

Main Warehouse

ST 80

44904 2

52321 78

D3672-13		Purchased	No			250	Each	948.0000	2.0000			
<div style="display: flex; justify-content: space-between;"> <div> <p>Phenolic Washer</p> </div> <div> <p>10-1-20</p> </div> </div>												

Warehouse Loc Qty Loc Code

Location

Main Warehouse

ST 948

54363 948

January 6, 2010 9:16:05 AM

Shop Packet Print

Picklist Print

January 6, 2010 9:16:05 AM

Work Order ID: 54957



Parent Item: D350-636-012



Parent Item Name: Skidtube RH

Start Date: 05/01/2010

Required Date: 18/01/2010

Comments: IPP RevP: as per ECN9490 DD 09.12.09 verified by:EC

Start Qty: 1.00

Required Qty: 1.00

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq II	Unit of Measure	Qty on Hand	Remaining Qty To Pick	Qty Issued	Date Issued	Status
MS21083C8		Purchased	No			250	Each	53.0000	2.0000			
											10-1-20	SP
NUT												

Warehouse	Loc Qty	Loc Code
Location		
Main Warehouse		
ST	53	
110584	5	
111424	2	
112492	6	
113149	40	

D2600-3-BENT Manufactured No

110 Each 16.0000 1.0000



Extrusion Bent

Warehouse	Loc Qty	Loc Code
Location		
Main Warehouse		
LG	5	
50675	5	
Main Warehouse		
ST	11	
43495	1	
47133	1	
52346	9	

11/1/6

Picklist Print

January 6, 2010 9:16:05 AM

Work Order ID: 54957



Parent Item: D350-636-012



Parent Item Name: Skidtube RH

Start Date: 05/01/2010

Required Date: 18/01/2010

Comments: IPP RevP: as per ECN9490 DD 09.12.09 verified by:EC

Start Qty: 1.00

Required Qty: 1.00

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Remaining Qty To Pick	Qty Issued	Date Issued	Status
D2744		Manufactured	No			110	Each	60.0000	1.0000			
Cap												

<u>Warehouse</u>	<u>Loc Qty</u>	<u>Loc Code</u>
<u>Location</u>		
Main Warehouse		
ST	60	
44892	1	
47488	23	
51922	36	

D2739		Manufactured	No			160	Each	5.0000	1.0000			
350 I Beam												

<u>Warehouse</u>	<u>Loc Qty</u>	<u>Loc Code</u>
<u>Location</u>		
Main Warehouse		
ST	5	
47124	1	
53900	4	

1 6/1/6

B-55034 AWM 10-1-11

Picklist Print

January 6, 2010 9:16:05 AM

Work Order ID: 54957



Parent Item: D350-636-012



Parent Item Name: Skidtube RH

Start Date: 05/01/2010

Required Date: 18/01/2010

Comments: IPP RevP: as per ECN9490 DD 09.12.09 verified by:EC

Start Qty: 1.00

Required Qty: 1.00

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit Measure	Qty on Hand	Remaining Qty To Pick	Qty Issued	Date Issued	Status
D2743		Manufactured	No			160	Each	299.0000	8.0000			

Crossbolt Spacer

<u>Warehouse</u>	<u>Loc Qty</u>	<u>Loc Code</u>
<u>Location</u>		
Main Warehouse		
LG	94	
50281	50	
51913	44	
Main Warehouse		
ST	205	
44891	2	
45555	17	
48275	1	
52310	185	

8 BE 10/01/12

D3490-3 Manufactured No

160 Each 37.0000 4.0000



Cross Bolt Spacer

<u>Warehouse</u>	<u>Loc Qty</u>	<u>Loc Code</u>
<u>Location</u>		
Main Warehouse		
ST	37	
45560	1	
48276	31	
51930	5	

4 BE 10/01/12

Picklist Print

January 6, 2010 9:16:05 AM

Work Order ID: 54957



Parent Item: D350-636-012



Parent Item Name: Skidtube RH

Start Date: 05/01/2010

Required Date: 18/01/2010

Comments: IPP RevP: as per ECN9490 DD 09.12.09 verified by:EC

Start Qty: 1.00

Required Qty: 1.00

Component Item ID/ Item Name	Replacement Item ID	Mfg Part	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Remaining Qty To Pick	Qty Issued	Date Issued	Status
D3490-1		Manufactured	No			160	Each	84.0000	4.0000			

Cross Bolt Spacer

<u>Warehouse</u>	<u>Loc Qty</u>	<u>Loc Code</u>
<u>Location</u>		
Main Warehouse		
ST	84	
45338	2	
47657	22	
48277	20	
51932	40	

4 BE 10/01/12

QTY -041	QTY -042	QTY -043	QTY -044	PART NUMBER	DESCRIPTION
X				D2750-041	350 SKIDTUBE ASSEMBLY, LH
	X			D2750-042	350 SKIDTUBE ASSEMBLY, RH
		X		D2750-043	350 SKIDTUBE ASSEMBLY, LH
			X	D2750-044	350 SKIDTUBE ASSEMBLY, RH
1	1	1	1	D2739	WEB
8	8	8	8	D2743	SPACER
1	1	1	1	D2744	CAP
8	8	8	8	D2745	BUSHING
1				D2750-1	SKIDTUBE WELDMENT, LH
	1			D2750-2	SKIDTUBE WELDMENT, RH
		1		D2750-3	SKIDTUBE WELDMENT, LH
			1	D2750-4	SKIDTUBE WELDMENT, RH
1		1		D3488-041	BLADE FITTING, LH
	1		1	D3488-042	BLADE FITTING, RH
4	4	4	4	D3493-1	SPACER
4	4			D3493-3	SPACER
		4	4	D3493-5	SPACER
8	8	8	8	D3492-041	PLUG ASSEMBLY
8	8			D3492-043	PLUG ASSEMBLY
		8	8	D3492-045	PLUG ASSEMBLY
1	1	1	1	D3535-25	WEARSHOE
1	1	1	1	D3536-25	GASKET
3	3	3	3	D3537-1	WEARPAD
8	8	8	8	D3531-1	WASHER
1	1	1	1	D3791-1	WEARPLATE
1	1	1	1	D3793-1	WEARSHOE
1	1	1	1	D3793-3	WEARSHOE
1	1	1	1	D3794-1	GASKET
1	1	1	1	D3794-3	GASKET
36	38	38	38	ALS4-1032-225	INSERT (OR ALS7-1032-225, AKS4-1032-225, AELS-1032-225)
34	34	34	34	AN9C5A	BOLT
4	4	4	4	AN3C6A	BOLT
4	4	4	4	AN9C44A	BOLT
1	1	1	1	AN9C35A	BOLT
29	38	38	38	AN960C10L	WASHER
1	1	1	1	AN960C616L	WASHER
4	4	4	4	NS21043-6	NUT
1	1	1	1	NS21083C8	NUT
4	4	4	4	NAS1515H3L	WASHER

GENERAL NOTES:

- MATERIAL: MAKE D2750-1/-2/-3/-4 FROM D2600-3 EXTRUSION (INITIAL LENGTH = 120.0).
- FINISH:
 - ACID ETCH, ALONG ASSEMBLY PER DART QSI 005 4.1 PRIOR TO INSTALLING D2739 WEB.
 - POWDER COAT WHITE (REF. 4.3.5.1) PER DART QSI 005 4.3
 - BLACK ANTI-SKID PAINT AS INDICATED TO 1.0 ABOVE SKIDTUBE CENTER-LINE PER DART 005 4.4 (OPTIONAL).
- TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- UNITS: INCHES UNLESS OTHERWISE NOTED
- BREAK SHARP EDGES: N/A
- IDENTIFICATION: N/A
- WEIGHT: D2750-041/-042/-043/-044 = 26.5 LBS
- WELD PER DART QSI 004
- INSTALL ALS4-1032-225 INSERTS AFTER FINISH AS INDICATED. DRILL "F" SIZE HOLES ($\phi 0.297$) FOR WEARSHOE INSERTS
- FINAL CONFIGURATION SHOULD HAVE THE FOLLOWING MINIMUM MECHANICAL PROPERTIES:
 - MINIMUM YIELD TENSILE STRENGTH = 35 KSI
 - MINIMUM ULTIMATE TENSILE STRENGTH = 38 KSI
- 1) SPRAY INSIDE OF TUBE WITH A COAT OF LPS LABORATORIES "LPS-3" AFTER FINISH AND AFTER INSTALLATION OF INSERTS. COAT ALL EXPOSED FASTENERS WITH LPS LABORATORIES "LPS PROCOAT" AFTER FINAL ASSEMBLY. CLEAN EXCESS OFF POWDER COATING WITH MEK DEGREASER.
- 2) SPACER AND PLUG INSTALLED SAME AS SECTION A-J EXCEPT HORIZONTAL
- 3) SPACER AND PLUG INSTALLED SAME AS SECTION A-P EXCEPT HORIZONTAL

SHOP COPY
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SUBJECT TO AMENDMENT
WITHOUT NOTICE
WORK ORDER
NO. 54957

BA10-1-05

RELEASED

F	INCORPORATE DS 3413; QTY (3) D3537-1 WAS QTY (5) (ZN C8-1); D3751-1/3 REPLACES D3535-1/3-35 (ZN B8-1); D3794-1/3 REPLACES D3535-1/3-35 (ZN B8-1); ADD D3791-1 (ZN L8-1); WEARSHOE HOLES UNDER FINDER SADDLE REMOVED (5 PL). WEARSHOE HARDWARE QTY UPDATED (ZN B8-1); D3488-041/D42 HARDWARE UPDATED (ZN C1-8, 9, 10, 11); ADD NOTE 12 AND 13 (ZN A5-1); REASON: REF. NCR 08-043	PH	08.07.16
E	CHANGE TO STAINLESS STEEL WEARPLATE; ADD RUBBER GASKETS; CHANGE INSERTS; ADD D3631-1; REMOVE QTY (32) NAS1515H3L; REMOVE QTY (10) NAS1515H3L; REMOVE D2741; QTY (2) AN960C616; REMOVE QTY (2) NS21083C8	CB	07.05.17
D	ADD HOLES AND SPACERS FOR APICAL FLOATS; INCORPORATE DEC 21332/107	PH	06.01.05
C	ADD D2753-3/D2754-4; INCORPORATE D2733 AND D2740	CP	06.11.18
B	CHANGE MS24564-5293 TO AN5-15A	CP	06.09.01
A	NEW ISSUE	DS	06.04.16
REV.	DESCRIPTION	BY	DATE
DESIGN	AS	DART AEROSPACE USA, INC.	
DRAWN	AS	PORT HADLOCK, WA	
CHECKED	AS	DRAWING NO.	REV. F
MFG. APPR.	AS	D2750	SHEET 2 OF 11
APPROVED	AS	TITLE	SCALE
DE APPR.	AS	350 SKIDTUBE ASSEMBLY	MTS
DATE	08.07.16	COPYRIGHT © 1984 BY DART AEROSPACE USA, INC. THIS DOCUMENT IS UNCLASSIFIED AND IS SUPPLIED ON THE CONDITION THAT IT NOT BE USED FOR ANY PURPOSES BY OTHERS OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE USA, INC.	

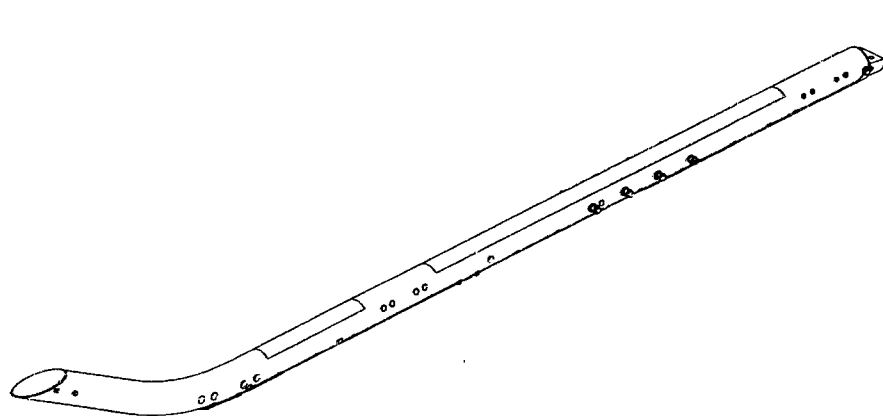
W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

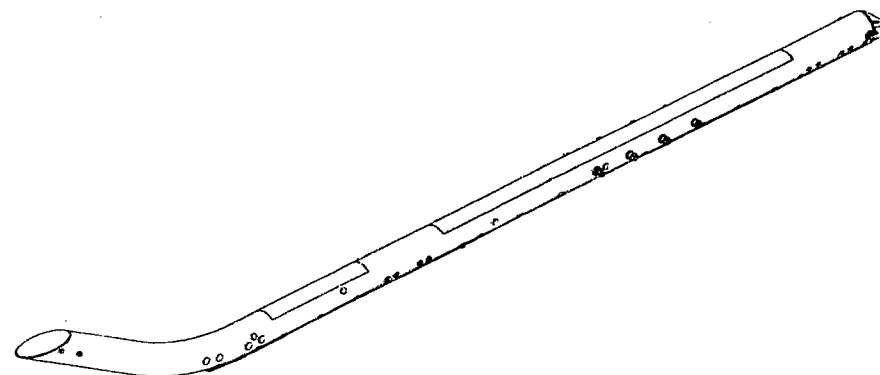
Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries



D2750-041 350 SKIDTUBE ASSEMBLY, LH



D2750-042 350 SKIDTUBE ASSEMBLY, RH

RELEASED
08.09.22/11

WLD 54957

DESIGN	PC	DART AEROSPACE USA, INC.	
DRAWN	AD	PORT HADLOCK, VA	
CHECKED	AD	DRAWING NO.	REV. F
MFG. APPR.	AD	D2750	SHEET 2 OF 11
APPROVED	AD	TITLE	SCALE
DE APPR.	AD	350 SKIDTUBE ASSEMBLY	NTS
DATE	08.07.16	<small>COPYRIGHT © 1998 BY DART AEROSPACE USA, INC. THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL, AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR REPRODUCED IN ANY MANNER WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE USA, INC.</small>	

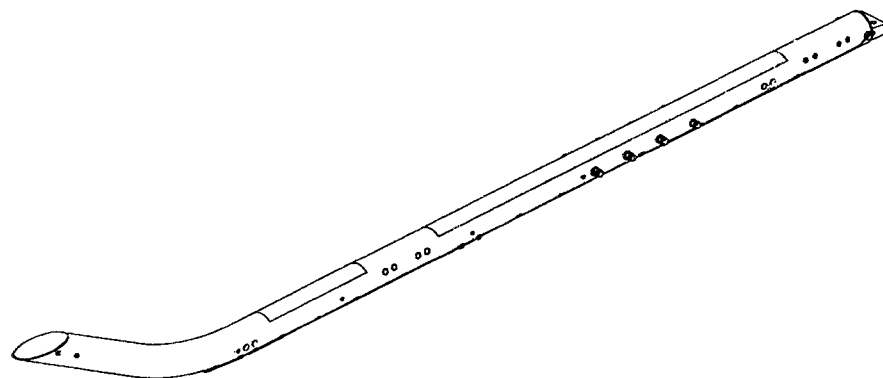
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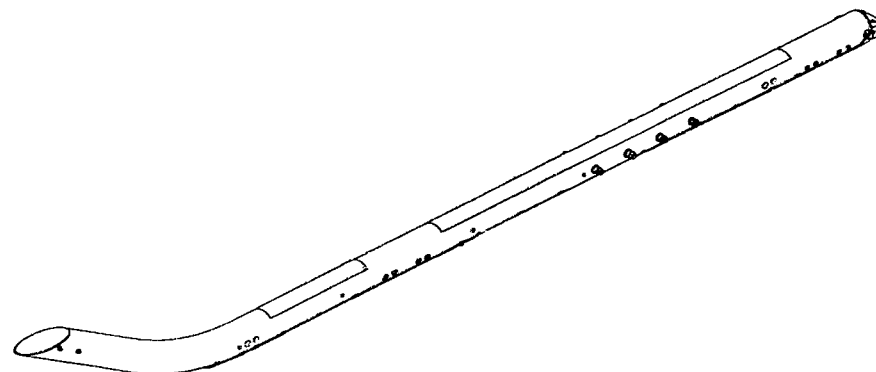
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DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries



D2750-043 350 SKIDTUBE ASSEMBLY, LH



D2750-044 350 SKIDTUBE ASSEMBLY, RH

RELEASED
68-9 11/14

w/o 54957

DESIGN	PD	DART AEROSPACE USA, INC.	
DRAWN	PD	PORT HADLOCK, VA	
CHECKED	NA	DRAWING NO.	REV. F
MFG. APPR.	NA	D2750	SHEET 3 OF 11
APPROVED	NA	TITLE	SCALE
DE APPR.	NA	350 SKIDTUBE ASSEMBLY	NTS
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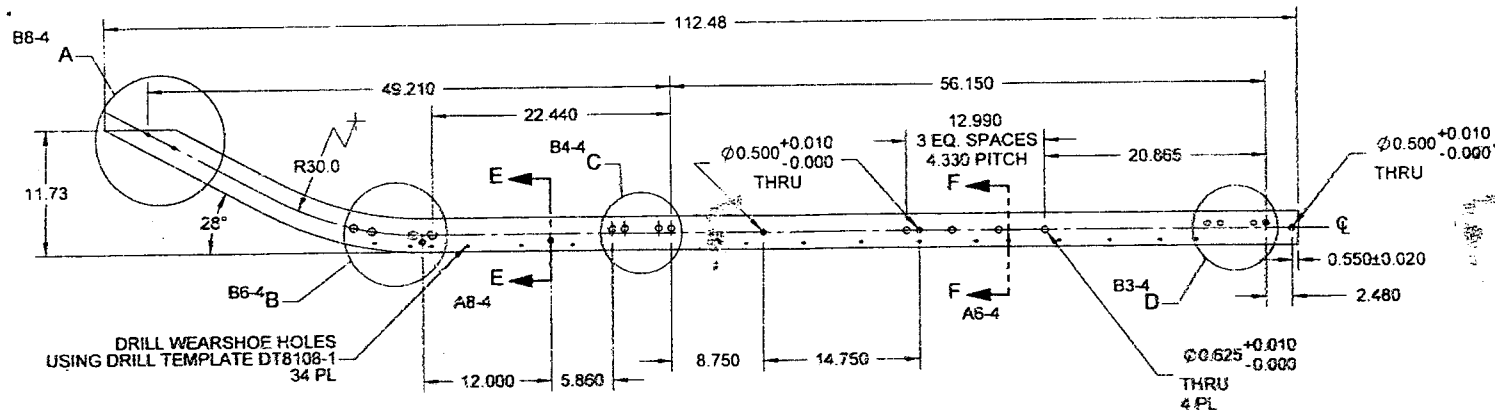
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DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

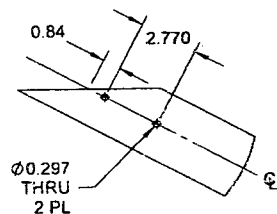
Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

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DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

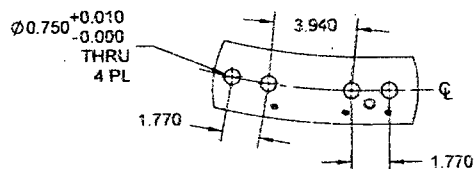
NOTE: Date & initial all entries



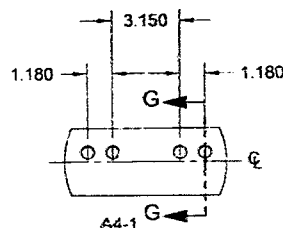
D2750-1 LH SKIDTUBE



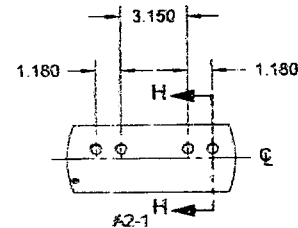
DETAIL A
SCALE 2X



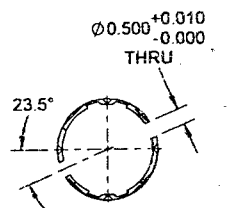
DETAIL B
SCALE 2X



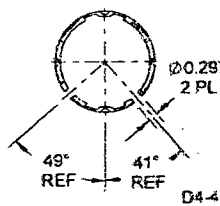
DETAIL C
SCALE 2X



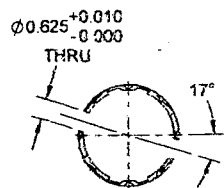
DETAIL D
SCALE 2X



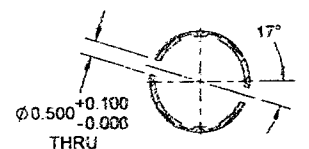
SECTION E-E
SCALE 3X, 2 PL









SECTION F-F
SCALE 3X, 17 PL



SECTION G-G
SCALE 3X, 4 PL



SECTION H-H
SCALE 3X, 4 PL

DESIGN		DART AEROSPACE USA, INC.	
DRAWN		PORT HADLOCK, WA	
CHECKED		DRAWING NO.	REV. F
MFG. APPR.		D2750	SHEET 4 OF 11
APPROVED		TITLE	SCALE
DE APPR.		350 SKIDTUBE ASSEMBLY	NTS
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W/O 54957

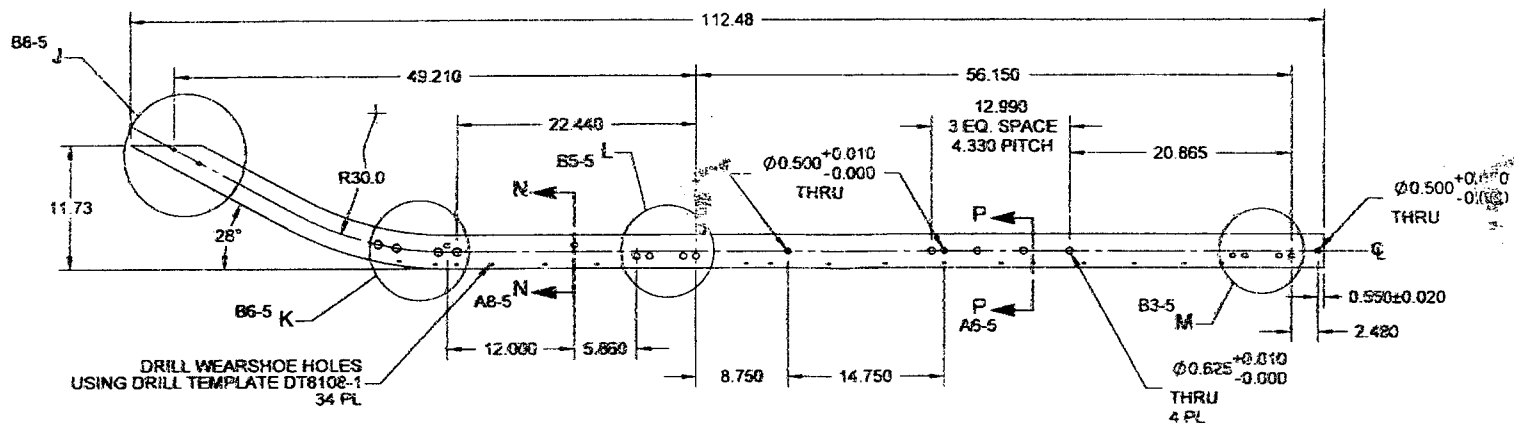
W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

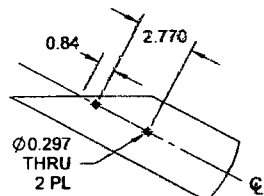
Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

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DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

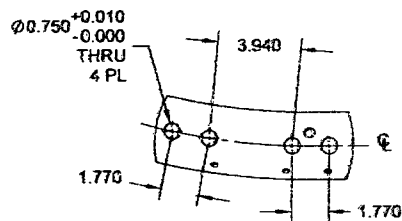
NOTE: Date & initial all entries



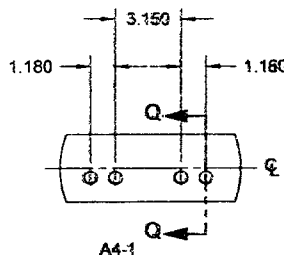
D2750-2 RH SKIDTUBE



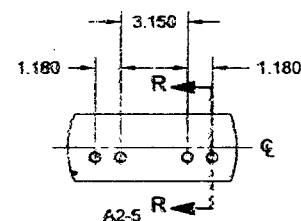
DETAIL J
SCALE 2X



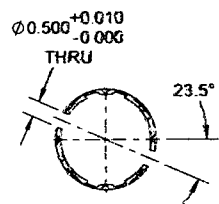
DETAIL K
SCALE 2X



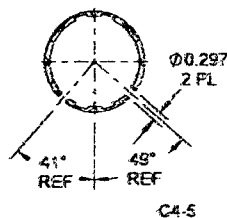
DETAIL L
SCALE 2X



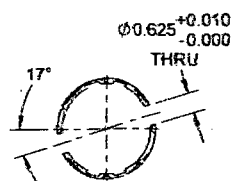
DETAIL M
SCALE 2X



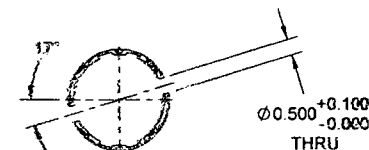
SECTION N-N
SCALE 3X, 2 PL



SECTION P-P
SCALE 3X, 17 PL



SECTION Q-Q
SCALE 3X, 4 PL



SECTION R-R
SCALE 3X, 4 PL

RELEASED
W/O 54957

DESIGN	PORT	DART AEROSPACE USA, INC.
DRAWN	PORT	PORT HADLOCK, VA
CHECKED	PORT	DRAWING NO. D2750
MFG. APPR.	PORT	REV. F
APPROVED	PORT	SHEET 5 OF 11
DE APPR.	PORT	SCALE
DATE	08.07.16	350 SKIDTUBE ASSEMBLY
		NTS

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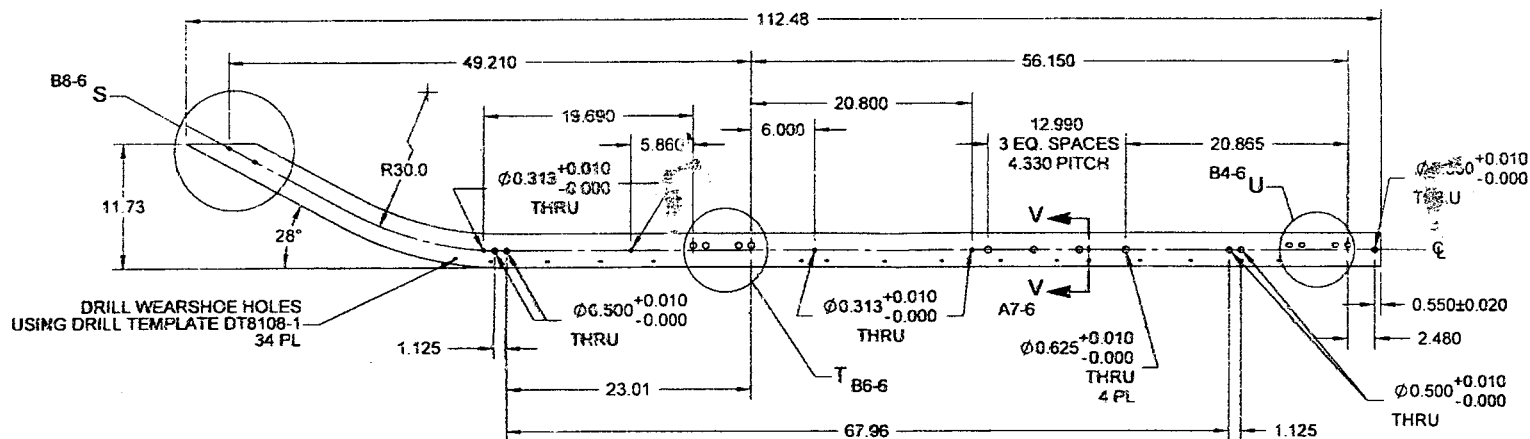
W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

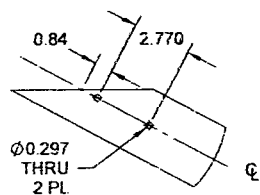
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NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

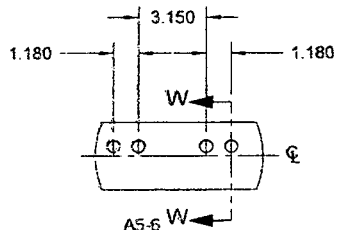
NOTE: Date & initial all entries



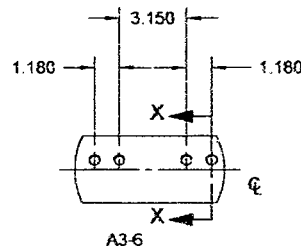
D2750-3 LH SKIDTUBE



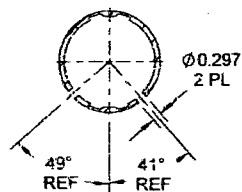
DETAIL S
SCALE 2X



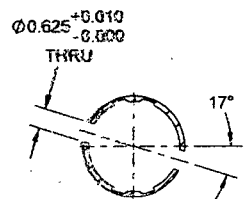
DETAIL T
SCALE 2X



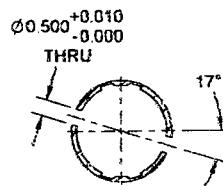
DETAIL U
SCALE 2X



SECTION V-V
SCALE 3X, 17 PL



SECTION W-W
SCALE 3X, 4 PL



SECTION X-X
SCALE 3X, 4 PL

RELEASED
08-07-16

DESIGN		DART AEROSPACE USA, INC.	
DRAWN		PORT HADLOCK, WA	
CHECKED		DRAWING NO. D2750	REV. F
MFG. APPR.			SHEET 6 OF 11
APPROVED		TITLE 350 SKIDTUBE ASSEMBLY	SCALE
DE APPR.			NTS
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w/lo 54957

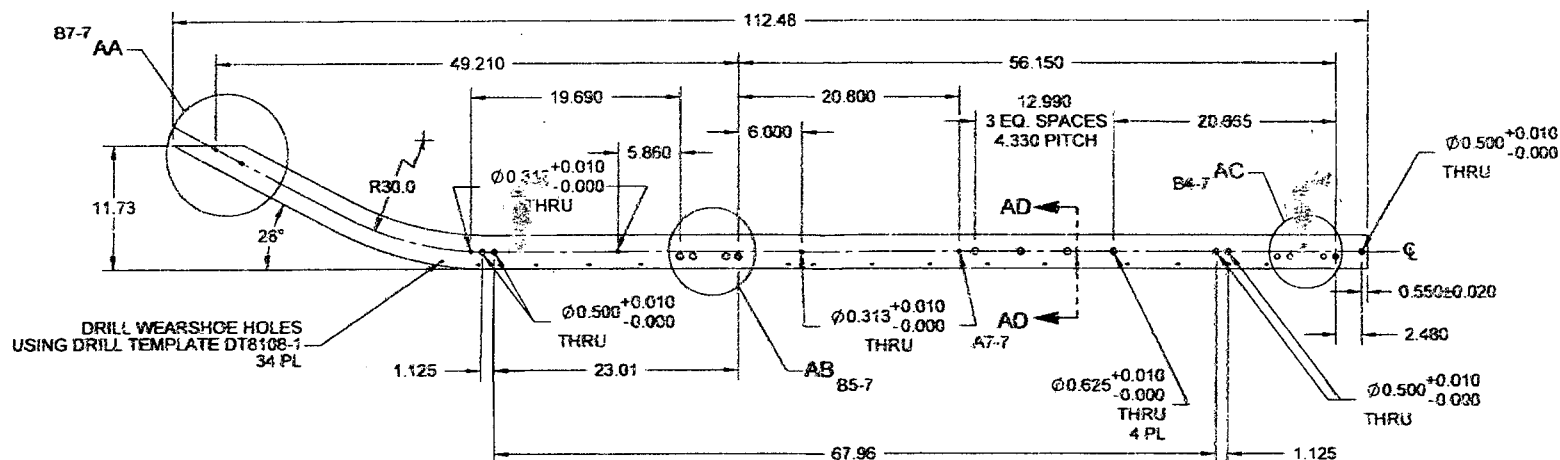
W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

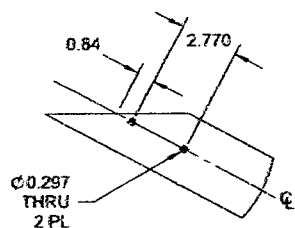
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NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

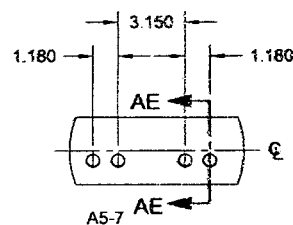
NOTE: Date & initial all entries



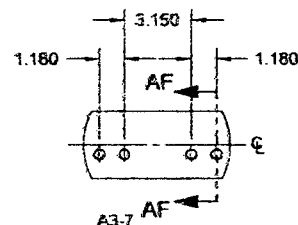
D2750-4 RH SKIDTUBE



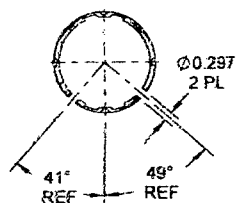
DETAIL AA
SCALE 2X



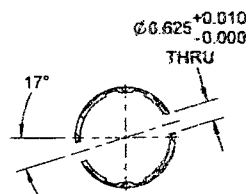
DETAIL AB
SCALE 2X



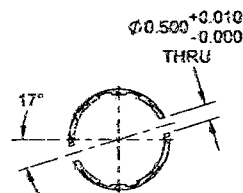
DETAIL AC
SCALE 2X



SECTION AD-AD
SCALE 3X, 17 PL



SECTION AE-AE
SCALE 3X, 4 PL



SECTION AF-AF
SCALE 3X, 4 PL

RELEASED
06-12-1980

DESIGN	PA	DART AEROSPACE USA, INC.	
DRAWN	PA	FORT HADLOCK, MA.	
CHECKED	PA	DRAWING NO.	REV. F
MFG. APPR.	PA	D2750	SHEET 7 OF 11
APPROVED	PA	TITLE	SCALE
DE APPR.	PA	350 SKIDTUBE ASSEMBLY	NTS
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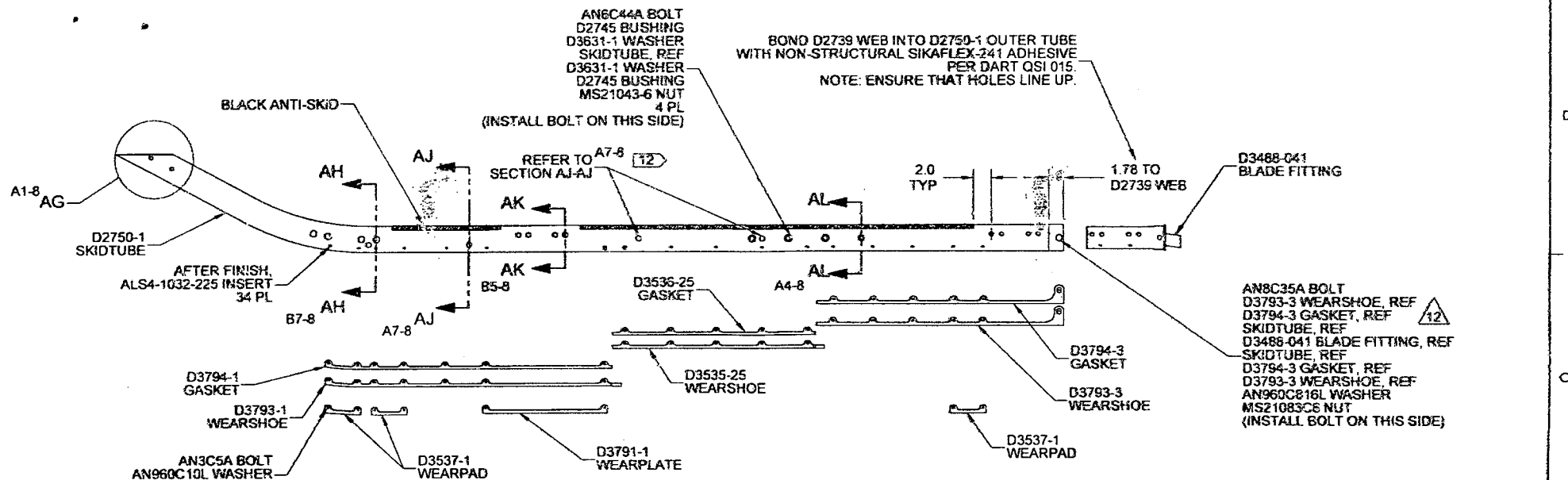
W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

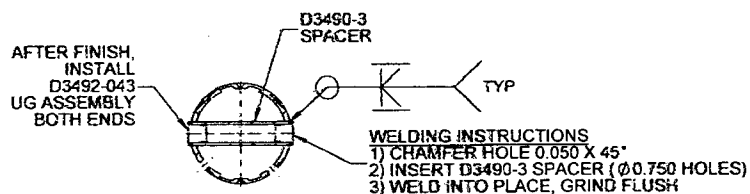
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NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

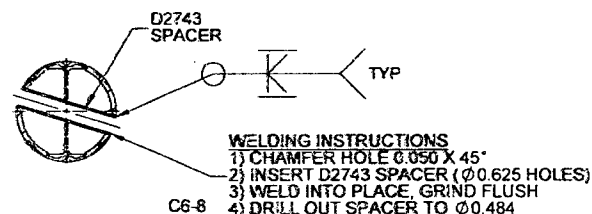
NOTE: Date & initial all entries



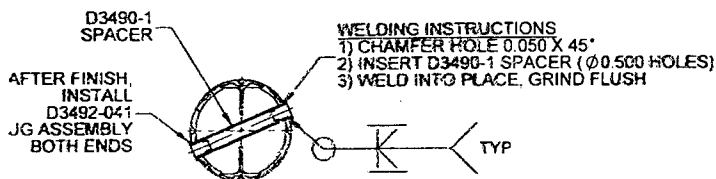
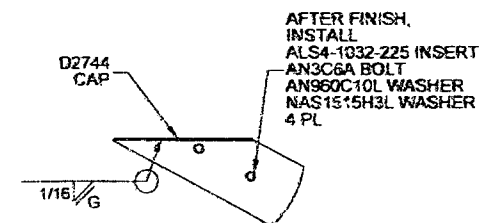
D2750-041 350 SKIDTUBE ASSEMBLY, LH



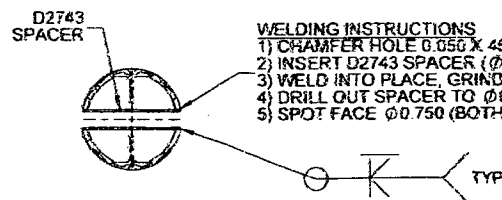
SECTION AH-AH
SCALE 3X, 4 PL



SECTION AK-AK
SCALE 3X, 4 PL



SECTION AJ-AJ
SCALE 3X, 4 PL



SECTION AL-AL
SCALE 3X, 4 PL
(HARDWARE REMOVED FOR CLARITY)

RELEASED
DETAIL LAG SCALE 2X
D8-8

DESIGN	W/0 54857	DART AEROSPACE USA, INC.	
DRAWN		PORT HADLOCK, WA	
CHECKED		DRAWING NO. D2750	REV. F
MFG. APPR.			SHEET 6 OF 11
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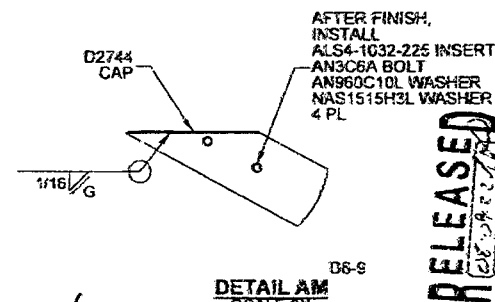
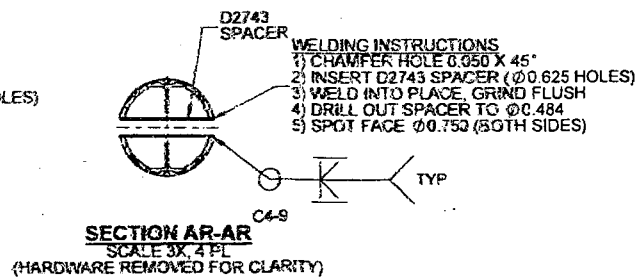
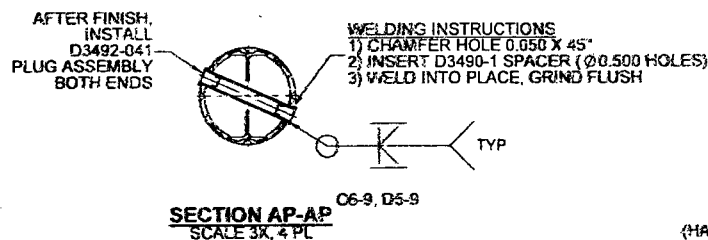
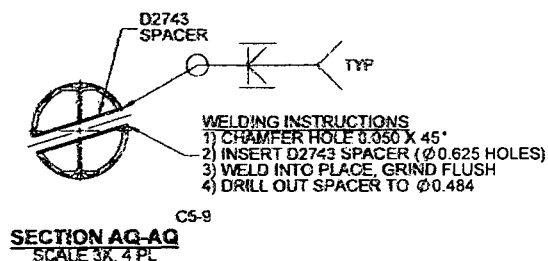
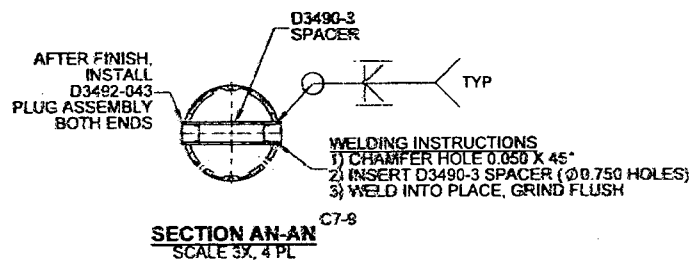
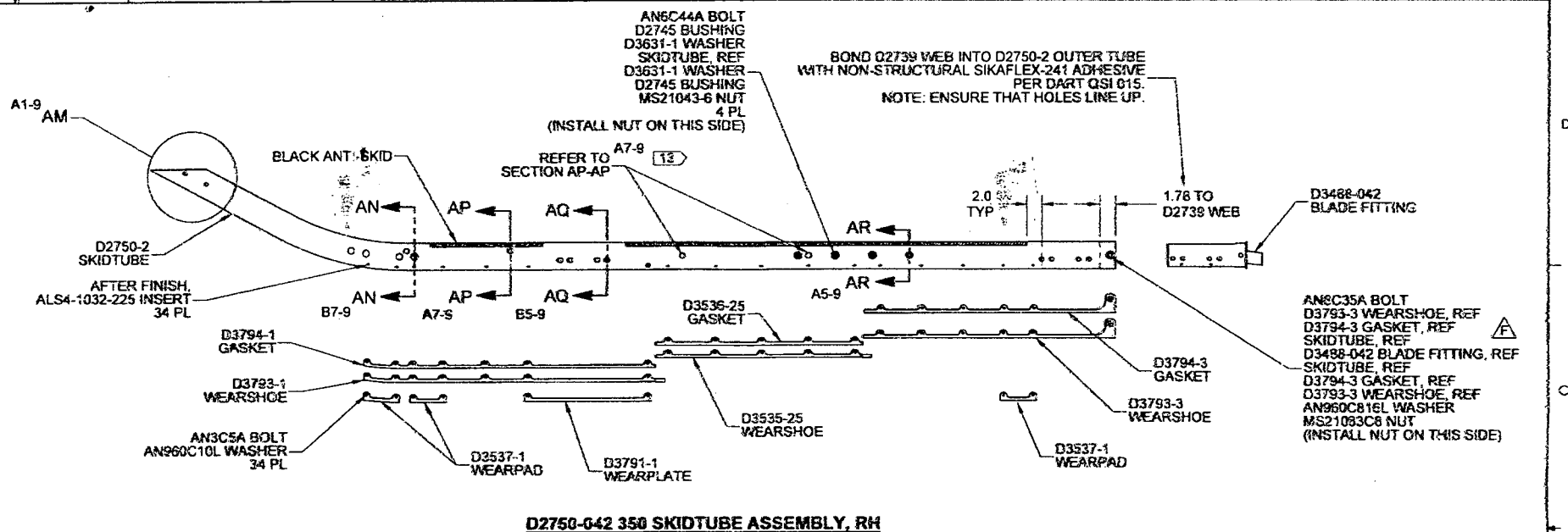
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DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries



DESIGN	W/0 54957	DATE	08.07.16
DRAWN	W/0 54957	CHECKED	W/0 54957
MFG. APPR.	W/0 54957	APPROVED	W/0 54957
DE APPR.	W/0 54957	DATE	08.07.16
DART AEROSPACE USA, INC. PORT HADLOCK, WA			
DRAWING NO. D2750		REV. F	
TITLE 350 SKIDTUBE ASSEMBLY		SHEET 9 OF 11	
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2008-07-16

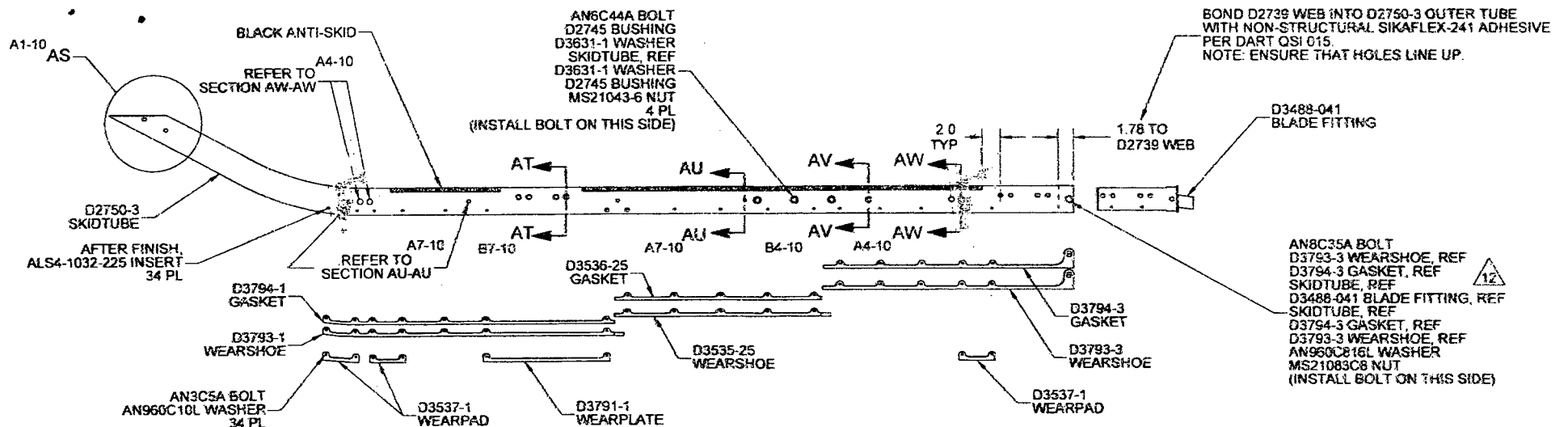
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DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

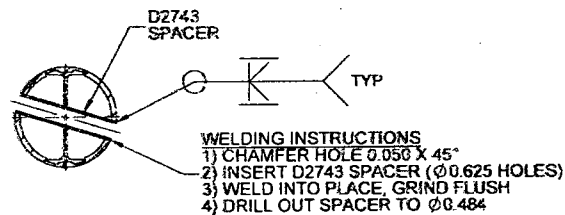
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DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

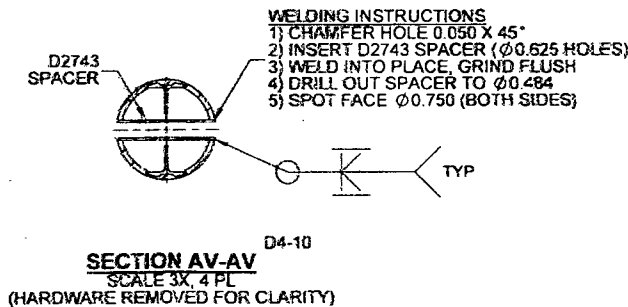
NOTE: Date & initial all entries



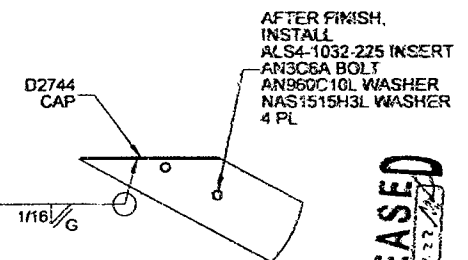
D2750-043 350 SKIDTUBE ASSEMBLY, LH



SECTION AT-AT
SCALE 3X, 4 PL

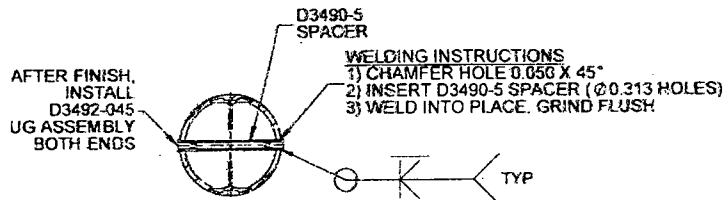


SECTION AV-AV
SCALE 3X, 4 PL
(HARDWARE REMOVED FOR CLARITY)

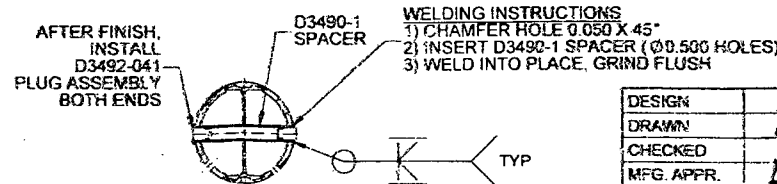


DETAIL AS
SCALE 2X

RELEASED
08-07-16



SECTION AU-AU
SCALE 3X, 4 PL



SECTION AW-AW
SCALE 3X, 4 PL

DESIGN	W/10	DART AEROSPACE USA, INC.	
DRAWN	W/10	PORT HADLOCK, WA	
CHECKED	W/10	DRAWING NO.	REV. F
MFG. APPR.	W/10	D2750	SHEET 1C OF 11
APPROVED	W/10	TITLE	SCALE
OE APPR.	W/10	350 SKIDTUBE ASSEMBLY	NTS
DATE	08.07.16	COPYRIGHT © 1983 BY DART AEROSPACE USA, INC. THIS DOCUMENT IS UNCLASSIFIED AND IS SUPPLIED ON THE CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE USA, INC.	

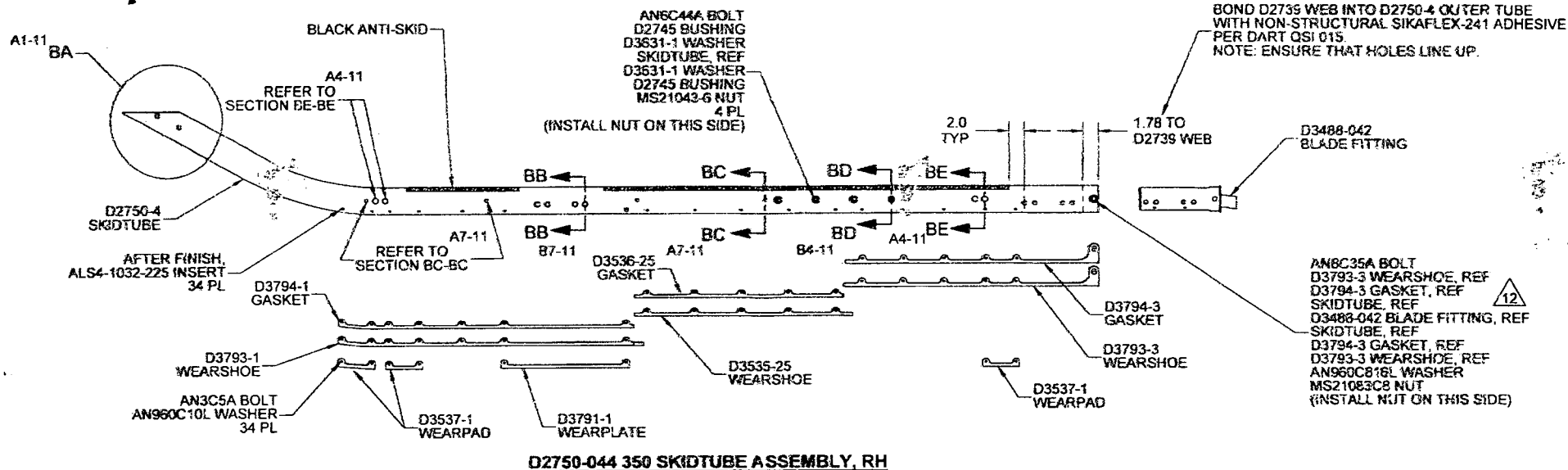
W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

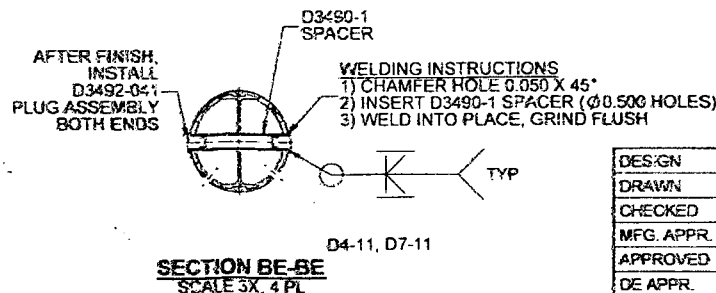
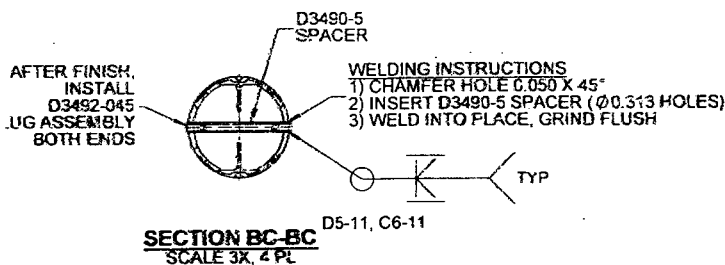
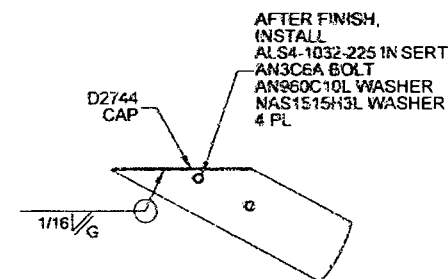
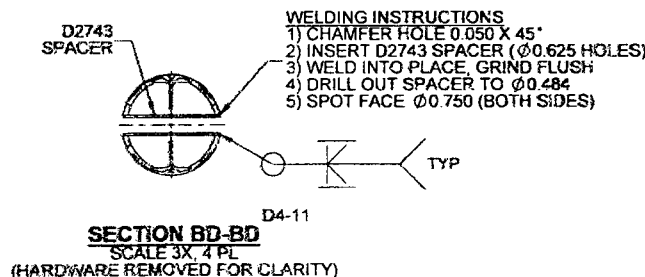
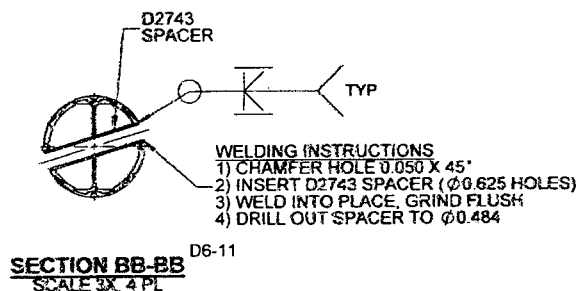
Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries



RELEASED



DESIGN	PH	DART AEROSPACE USA, INC.	
DRAWN	PH	PORT HADLOCK, MA	
CHECKED	PH	DRAWING NO.	REV. F
MFG. APPR.	PH	D2750	SHEET 11 OF 11
APPROVED	PH	TITLE	SCALE
DE APPR.	PH	350 SKIDTUBE ASSEMBLY	NTS
DATE	08.07.16	COPYRIGHT © 1996 BY DART AEROSPACE USA, INC.	

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

NO. 222

AWS D17.1.2001
QUALIFICATION TEST RECORD

Name: Barclay Elliott
Job number: 54986
Part number: D350-636 012
Description: 350 skid tube
Welding Process: Tig[☒] Mig[]
Base material: Aluminium
Current: AC[☒] DC[]

TEST REQUIREMENTS AND RESULTS

Visual: pass[☒] fail[]
Penetration: pass[☒] fail[]

UNACCEPTABLE

Cracks: pass[☒] fail[]
Undercut: pass[☒] fail[]
Pin holes: pass[] fail[]
Overlap (cold lap): pass[☒] fail[]
Porosity (surface): pass[☒] fail[]
Coloration: pass[☒] fail[]

Qualifier Pat D. Date of Test Coupon 10.01.11

Welder Barclay Elliott Date of Test Coupon 10-04-11

The above named individual is qualified in accordance with AWS D17.1.2001 to weld